Amendments to the claims

1.   (Currently amended) A m ethod o f m anaging s torage o f a t l east o ne it em in a network of heterogeneous storage devices, the heterogeneous storage devices comprising a local storage device and one or more remote storage devices, the method comprising:

detecting a storage event, the detection being effected by the local storage device;

obtaining input information, the input information having parameter values related to the item and the heterogeneous storage devices; ~~and~~

processing the input information to determine a storage assignment, the storage assignment being determined for storage of the item on one or more of the heterogeneous storage devices based on item-device suitability determined from a combination of at least one item selection rule and at least one storage selection rule_and

avoiding a deadlock between storage assignments, the storage assignments being determined by two or more local storage devices in the network.

2.   (Original) The method as recited in claim 1 wherein processing the input information if the event is an item addition event comprises:

determining suitability of the heterogeneous storage devices in the network for storing an added item, the added item being the item that is added to the local storage device; and

determining the storage assignment, the storage assignment comprising a list of destination storage devices, the destination storage devices being optimal locations for storing the added item.

3.   (Original) The method as recited in claim 1 wherein processing the input information if the event is an item optimization event comprises:

determining suitability of one or more remote items for storing the remote items on the local storage device, wherein the remote items are items located on the remote storage devices; and

determining the storage assignment, the storage assignment comprising a list of remote items for storing the remote items on the local storage device.

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4.   (Original) The method as recited in claim 1 wherein processing the input information if the event is a device full event comprises:

determining suitability of one or more local items for relocating the local items, wherein the local items are the items located on the local storage device;

selecting a list of local items that are to be relocated;

determining suitability of the remote storage devices for storing the selected local items; and

determining storage assignment, the storage assignment comprising a list of destination storage devices, the destination storage devices being the remote storage devices that are suitable for storing the selected local items.

5.   (Original) The method as recited in claim 1 wherein the method further comprises storing the item on the heterogeneous storage devices in accordance with the storage assignment.

6.   (Canceled)

7.   (Currently amended) A system for managing storage of at least one item in a network of heterogeneous storage devices, the system comprising:

an event detection module, the event detection module detecting storage events on the heterogeneous storage devices;

an input provider module, the input provider module providing item metrics and storage device metrics;

a decision engine, the decision engine being connected to the input provider module and the event detection module, the decision engine determining storage assignment, the storage assignment assigning the item to one or more of the heterogeneous storage devices based on item-device suitability, wherein the decision engine includes a policy module with at least one item selection rule, at least one storage selection rule, and rules for preventing a deadlock between storage assignments; and

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a storage assignment implementation module connected to the decision engine, the storage assignment implementation module storing the item on one or more of the heterogeneous storage devices in accordance with the storage assignment.

8.　(Original) The system as recited in claim 7 wherein the input provider module is centrally implemented in the network of heterogeneous storage devices.

9.　(Original) The system as recited in claim 7 wherein the input provider module is implemented on each storage device in the network.

10.　(Cancelled).

11.　(Original).The system as recited in claim 7 wherein the decision engine is centrally implemented in the network of heterogeneous storage devices.

12.　(Original) The system as recited in claim 7 wherein the decision engine is implemented on each storage device in the network.

13.　(Cancelled).

14.　(Cancelled).

15.　(Cancelled).

16.　(Cancelled).

17.　(Cancelled).

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